

FLORIDA WILDLIFE FEDERATION RESOLUTION
CONCERNING AQUIFER STORAGE AND RECOVERY (ASR) PROJECTS

Adopted by FWF Board of Directors and
House of Delegates on Sept. 9, 2001

A RESOLUTION OF THE FLORIDA WILDLIFE FEDERATION SUPPORTING COMPREHENSIVE SCIENTIFIC EVALUATION OF AQUIFER STORAGE AND RECOVERY PILOT PROJECTS FOR THE PURPOSE OF ASSESSING THE TECHNOLOGY'S EFFECTIVENESS AT PROTECTING THE ENVIRONMENT AND PUBLIC WATER SUPPLIES OF SOUTH FLORIDA.

WHEREAS, the citizens and environment of South Florida may benefit from the implementation of Aquifer Storage and Recovery (ASR) Projects associated with the Comprehensive Everglades Restoration Plan (CERP); however, it is a matter of great public interest that the effects and costs of this technology be rigorously evaluated; and

WHEREAS, the proposed CERP ASR components ultimately include 333 ASR wells, an unprecedented scale for implementation of this technology; and

WHEREAS, the National Academy of Sciences Committee on Restoration of the Greater Everglades Ecosystem (CROGEE), as articulated in the recently released Aquifer Storage and Recovery in the Comprehensive Everglades Restoration Plan: A Critique of the Pilot Projects and Related Plans for ASR in the Lake Okeechobee and Western Hillsboro Area, concluded that:

1. Regional analysis of the subsurface is crucial to evaluating the potential for success for CERP ASR components,
2. Biogeochemical reactions in the subsurface and the potential impacts on receiving water bodies at the surface require further investigation and understanding, and
3. Thorough monitoring and testing at pilot project sites is necessary to provide data to the referenced regional and water quality investigations; and

WHEREAS, the Aquifer Storage and Recovery Issue Team of the South Florida Ecosystem Restoration Task Force, as articulated in its July 1999 report to the South Florida Ecosystem Restoration Working Group, recommended further analyses of several technical issues relating to ASR implementation, including:

1. Characterization of the quality of prospective source water, spatial and temporal variability,
2. Characterization of regional hydrogeology of Upper Floridan Aquifer: hydraulic properties and water quality,
3. Analysis of critical pressure for rock fracturing,
4. Analysis of site and regional changes in head and patterns of flow,
5. Analysis of water quality changes during movement and storage in the aquifer,
6. Aquifer Storage and Recovery potential effects on mercury bioaccumulation for ecosystem restoration projects, and
7. Relationship between ASR storage interval properties and recovery rates and recharge volume; and

WHEREAS, further research is warranted to ensure that injection of surface waters into Florida's aquifers will not adversely impact public health and water supplies, specifically investigating groundwater contamination; and

WHEREAS, ASR may provide technology that can provide multi-year storage to improve or manage for drought conditions, such as those experienced by Florida during the last year and a half, and may provide an additional tool to manage flooding to protect estuaries and other natural areas; and

WHEREAS, ASR technology is purported to provide cost-effective benefits relative to other storage options, related to evapotranspiration or seepage losses and requires less land; and

WHEREAS, there are many significant concerns that must be addressed prior to the full-scale implementation of the ASR components described in the CERP; and

WHEREAS, the Governor's Commission for a Sustainable South Florida, in its Report on the January 24, 1999 Draft Implementation Plan of the C&SF Project Restudy (March 3, 1999), recommended that the South Florida Water Management District, in conjunction with the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers, "should develop an Aquifer Management and Protection Plan for the Floridan Aquifer. This plan should consider existing and proposed ASR facilities, existing permitted withdrawals for water supplies, potential artesian wells to support Biscayne Bay, and potential contamination from treated wastewater;" therefore

BE IT RESOLVED BY THE FLORIDA WILDLIFE FEDERATION THAT:

1. The Florida Wildlife Federation supports ongoing efforts by the U. S. Army Corps of Engineers, the Florida Department of Environmental Protection, and the South Florida Water Management District, to evaluate ASR pilot projects proceeding in a cautious, methodical manner to address the many questions about implementing ASR technology, including the concerns raised by the Aquifer Storage and Recovery Issue Team and the National Academy of Sciences; and
2. The pilot projects and the regional study shall address all of these concerns. The combined strategy of (a) conducting three CERP ASR pilot projects at Lake Okeechobee, Caloosahatchee River, and Western Hillsboro Basin, as well as a City of West Palm Beach demonstration project, and (b) evaluating on a continuing basis the projected impacts of the proposed 333 ASR wells on the environment and existing water users through an ASR Regional Study as an appropriate way to address these technical issues; and
3. The U. S. Army Corps of Engineers, Florida Department of Environmental Protection, and South Florida Water Management District shall conduct the necessary data collection and scientific studies to evaluate the ASR technology for the benefit of Everglades Restoration and long-term regional water supplies as outlined in the CERP; and
4. The U. S. Army Corps of Engineers and South Florida Water Management District must develop contingency plans to accommodate potential component performance shortfalls and delays in implementation which shall also evaluate the costs and benefits of surface water storage on a temporary and permanent basis in the Everglades Agricultural Area (EAA) and throughout the Everglades basin exclusive of existing public conservation lands. Contingency plans shall be developed as part of the individual pilot projects and the regional study. If the ASR projects do not perform as anticipated, it will be necessary to have well-designed contingency plans ready for immediate implementation. The Federation believes that this contingency plan must include the option of purchasing additional water storage areas throughout the Everglades Basin.
5. The CERP implementation process should continue to be as open, inclusive and informed as possible at every stage to ensure a plan that continues to enjoy the broadest public support. Public outreach efforts must be active efforts to fully inform and engage all stakeholders. Research results concerning ASR need to be broadly disseminated to the public. Special attention must be given to environmental justice issues and the concerns of minority communities around Lake Okeechobee. Additionally, all decisions regarding the implementation of ASR should be made in consideration of public comment.